

February 25, 2019

**ExxonMobil Beaumont Chemical Plant  
ExxonMobil Chemical Company Flare Consent Decree  
Semi-Annual Report**

Director, Air Enforcement Division  
Office of Civil Enforcement  
U.S. Environmental Protection Agency  
Mail Code 2242-A  
1200 Pennsylvania Ave., N.W.  
William Jefferson Clinton Building  
Room 1119  
Washington, D.C. 20460-0001  
Certified Mail No. 7013 1090 0000 3449 6513

Associate Director  
Air, Toxics, and Inspections Coordination Branch (6 EN-A)  
U.S. EPA, Region 6  
1445 Ross Avenue  
Dallas, Texas 75202  
Certified Mail No. 7013 1090 0000 3449 6520

**Attention: Consent Decree, Civil Action No. 4:17-cv-3302**

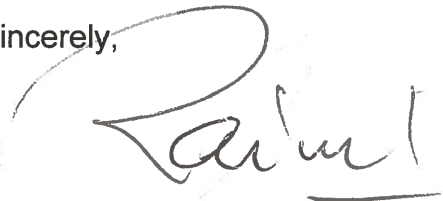
Pursuant to Section X, Paragraphs 66-73 of Consent Decree, Civil Action No. 4:17-cv-3302, ExxonMobil Oil Corporation (ExxonMobil) submits this Semi-Annual Report covering the period of June 6, 2018 through December 31, 2018.

Certification Statement  
Per Consent Decree Paragraph 71:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

If you have any questions about this SAR or require any additional information, please contact Carley Blackburn 409-240-4399

Sincerely,

A handwritten signature in black ink, appearing to read "Raimbault", with a horizontal line underneath.

Marc Raimbault  
Beaumont Chemical Plant Site Manager  
ExxonMobil Beaumont Chemical Plant

Attachment

cc: [parrish.robert@epa.gov](mailto:parrish.robert@epa.gov)  
[foley.patrick@epa.gov](mailto:foley.patrick@epa.gov)  
[osbourne.margaret@epa.gov](mailto:osbourne.margaret@epa.gov)



**Beaumont Chemical Plant**

**Beaumont, Texas**

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**SEMI-ANNUAL REPORT  
PURSUANT TO CONSENT DECREE,  
*UNITED STATES, ET AL V. EXXON MOBIL CORPORATION  
AND EXXONMOBIL OIL CORPORATION,*  
CIVIL ACTION NO. 4:17-cv-3302 (S.D. TX)**

**June 6, 2018 – December 31, 2018**

**2775 Gulf States Road  
Beaumont, Texas**

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## SECTION 1 STATUS OF CONSENT DECREE SECTION V COMPLIANCE REQUIREMENTS

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This progress report provides the status of implementation of Consent Decree requirements that, during the reporting period, require the ExxonMobil Beaumont Chemical Plant to undertake a specific action or make a submittal to an agency; or otherwise require the ExxonMobil Beaumont Chemical Plant to take specific steps to implement new obligations, including new control or emissions requirements, new monitoring requirements, or institution of new procedures. Once the ExxonMobil Beaumont Chemical Plant has reported a requirement as implemented, it will not appear in subsequent progress reports under this subparagraph.

Consent Decree Paragraph 66a. – b.

a. A description of the status of work performed and progress made toward implementing all requirements of Consent Decree Section V (Compliance Requirements) at the Covered Facilities. This topic should describe any major milestones completed and remaining to be completed;

**ExxonMobil Beaumont Chemical Plant has completed the following work required to meet the requirements of Consent Decree Section V Compliance Requirements. Major milestones for this semi-annual reporting period:**

**TABLE 1.1 Major Milestones Completed For This Reporting Period**

| Covered Flare          | Description of Work Completed During This Reporting Period  |
|------------------------|---|
| LP East, HP West, UDEX | The Flare Gas Recovery project engineering is complete and project is fully funded.<br>Construction activities are in progress. |

**ExxonMobil Beaumont Chemical Plant is in the process of completing the following work as required to meet the requirements of Consent Decree Section V Compliance Requirements.**

**TABLE 1.2 Status of Remaining Work to be Completed**

| Applicability           | Remaining Work To Be Completed                               | Anticipated Completion Date |
|-------------------------|--|-----------------------------|
| LP East, HP West, UDEX, | Submit Flare Data and Monitoring Systems and Protocol Report | No later than 6/6/2019      |

|   |   |                        |
|---|---|------------------------|
| Paraxylene and CS                         |   |                        |
| LP East, HP West, UDEX, Paraxylene and CS | Submit Initial Waste Gas Minimization Plan                                      | No later than 6/6/2019 |
| LP East, HP West, UDEX, Paraxylene and CS | Conduct internal reporting and recordkeeping for Reportable Flaring Incidents   | No later than 6/6/2019 |
| ExxonMobil Beaumont Chemical Plant        | Submit report showing fenceline monitor locations and providing a reporting URL | No later than 3/3/2019 |
| ExxonMobil Beaumont Chemical Plant        | Collect fenceline monitoring data for compliance                                | No later than 6/6/2019 |

b. A description of any problems encountered or anticipated in meeting the requirements in Consent Decree Section V (Compliance Requirements) at the Covered Facilities, together with implemented or proposed solutions;

**ExxonMobil Beaumont Chemical Plant has not encountered nor anticipates problems in meeting the requirements of Consent Decree Section V Compliance Requirements as shown in Table 1.3.**

**TABLE 1.3 Encountered or Anticipated Problems In Work To be Completed**

| Covered Flare | Encountered or Anticipated Problem(s) | Proposed or Implemented Solution(s) |
|---------------|---------------------------------------|-------------------------------------|
| None          | None                                  | None                                |

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## SECTION 2 STATUS OF CONSENT DECREE SECTION V REPORTING REQUIREMENTS

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Below is a summary of the status of reports as required under Consent Decree Section V.

### Flare Data and Monitoring Systems and Protocol Report

Requirement: CD Paragraph 18

Description: For each Covered Flare, by no later than 365 Days after the Effective Date, the Defendants must submit a report, consistent with the requirements in Appendix 1.5, to EPA that includes the following:

- a. The information, diagrams, and drawings specified in Paragraphs 1–7 of Appendix 1.5;
- b. A detailed description of each instrument and piece of monitoring equipment, including the specific model and manufacturer, that the Defendants have installed or will install in compliance with Paragraphs 20–24 of this Consent Decree (Paragraphs 8–9 of Appendix 1.5); and
- c. A narrative description of the monitoring methods and calculations that the Defendants will use to comply with the requirements of Paragraph 43 (Paragraph 10 of Appendix 1.5).

**Status: This section does not apply to this semi-annual reporting period. The Flare Data and Monitoring Systems and Protocol Report is due no later than June 6, 2019.**

### Initial Waste Gas Minimization Plan (“Initial WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 365 Days after the Effective Date, for each Covered Flare, the Defendants must submit to EPA an Initial Waste Gas Minimization Plan that discusses and evaluates flaring Prevention Measures on both a facility-wide and Covered Flare-specific basis for each Covered Facility.

**Status: This section does not apply to this semi-annual reporting period. The Initial Waste Gas Minimization Plan is due no later than June 6, 2019.**

### First Updated Waste Gas Minimization Plan (“First Updated WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 730 Days after the Effective Date, the Defendants must submit to EPA a First Updated WGMP that updates, if and as necessary, the information, diagrams, and drawings required in the Flare Data and Monitoring Systems and Protocol Report required by Paragraph 18 and the information required in sub-Paragraphs 29.a–29.e for the 12-month period after the period covered by the Initial Waste Gas Minimization Plan.

**Status: This section does not apply to this semi-annual reporting period. The first Updated Waste Gas Minimization Plan is due no later than June 5, 2020.**

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## SECTION 3 STATUS OF PERMITTING ACTIVITY

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Consent Decree Paragraph 66c.

c. A description of the status of any permit applications, including a summary of all permitting activity, pertaining to compliance with this Consent Decree;

**The ExxonMobil Beaumont Chemical Plant is preparing to submit a permit application to TCEQ for NSR Permit 83702. The application will request to incorporate the requirements listed in the Consent Decree sub-Paragraph 60.c into Permit 83702 such that the requirements will (i) become and remain “applicable requirements” as that term is defined in 40 C.F.R §70.2 and (ii) survive the termination of the Consent Decree. The permit application is planned to be submitted within one year of the Effective Date (June 6, 2018) in accordance with Consent Decree Paragraph 60.b.**

**The ExxonMobil Beaumont Chemical Plant is preparing to submit a permit application to TCEQ’s Air Permit Division for Title V Permit O2292. The application will request to incorporate the requirements listed in the Consent Decree Paragraph 60.c into Title V O2292. In accordance with Consent Decree Paragraph 60.b., the permit application will be submitted no later than three years after the Effective Date or one year after the respective deadline for the Compliance Requirements listed in Paragraph 60.c.**



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## SECTION 4 REPORTS SUBMITTED TO LDEQ

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Consent Decree Paragraph 66d.

- d. A copy of any reports that were submitted only to LDEQ and that pertain to compliance with this Consent Decree.

**Status: This section does not apply because ExxonMobil Beaumont Chemical Plant is located in the State of Texas and thus does not submit reports to LDEQ.**

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## SECTION 5 STATUS OF SEP(S)

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Consent Decree Paragraph 66e.

e. A description of the Defendants' progress in satisfying its obligations in connection with the SEP(s) under Section VI including, at a minimum, a narrative description of activities undertaken; status of any construction or compliance measures, including the completion of any milestones set forth in the SEP Work Plan (attached as Appendix 2.1), and a summary of costs incurred since the previous report;

**Refer to Semi-Annual Report submitted by ExxonMobil Baytown Chemical Plant for status of Federal Supplemental Environmental Project (SEP).**

**Refer to Semi-Annual Report submitted by the ExxonMobil Baton Rouge Chemical Plant for status of Louisiana Beneficial Environmental Projects (BEPs).**

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## SECTION 6 UPDATED WASTE GAS MINIMIZATION PLAN (WGMP)

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Consent Decree Paragraph 66f

f. Any updated WGMP for the Covered Facilities that is required to be submitted by Paragraph 31.

### Subsequent Updates to WGMPs (“Subsequently Updated WGMP”)

Requirement: CD Paragraph 31

On an annual basis after submitting the First Updated WGMP until termination of the Decree, the Defendants must submit an updated WGMP for a Covered Facility as part of the Semi-Annual Report required by Section IX (Reporting Requirements) if, at that Covered Facility, the Defendants: a) commence operation of a Newly Installed Covered Flare or permanently remove a Covered Flare from service, b) connect a new Waste Gas stream to a Covered Flare, c) intentionally modify the Baseload Waste Gas Flow Rate to a Covered Flare, d) install additional FGRS, or e) change the design of a Covered Flare. Each update must update, if and as necessary, the information required in sub-Paragraphs 29.a.i - 29.a.iii. Each update must update, if and as necessary, the information required in sub-Paragraphs 30.a and 30.b. To the extent the Defendants propose to extend any schedule set forth in a previous WGMP for any of the Covered Facilities, the Defendants may do so only with good cause, the determination of which is subject to Section XII (Dispute Resolution).

**This section does not apply to this semi-annual reporting period. The Initial Waste Gas Minimization Plan is due no later than June 6, 2019 and the first Updated Waste Gas Minimization Plan is due no later than June 5, 2020.**

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## SECTION 7 SUMMARY OF INTERNAL FLARING INCIDENT REPORTS

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Consent Decree Paragraph 66g.

- g. Any summary of internal flaring incident reports as required by Paragraph 34.

**Status: This section does not apply to this reporting period. In accordance with Paragraph 34.a. of the Consent Decree, ExxonMobil Beaumont Chemical Plant will begin internal Reportable Flaring Incident (RFI) reporting and recordkeeping no later than June 6, 2019.**

## SECTION 8 REPORTING SUMMARY

Consent Decree Paragraph 66h.

- h. A summary of the following, per Covered Flare per Calendar Quarter (hours shall be rounded to the nearest tenth):
- (1) The total number of hours of Instrument Downtime claimed pursuant to Paragraph 45, expressed as both an absolute number and a percentage of time the Covered Flare that the instrument/equipment monitors is In Operation and Capable of Receiving Sweep, Supplemental, and/or Waste Gas;

**TABLE 8.1 June 6 – June 30, 2018 Instrument Downtime Summary**

| <b>Covered Flare</b> | <b>Monitoring System</b>          | <b>System Downtime (%)</b> | <b>System Downtime (hours)</b> |
|----------------------|-----------------------------------|----------------------------|--------------------------------|
| CS Flare             | Camera and Recording System       | 1.3                        | 8.0                            |
| CS Flare             | 5262 Header Vent Meter            | 0.0                        | 0.0                            |
| CS Flare             | 5186 Header Vent Meter            | 0.0                        | 0.0                            |
| CS Flare             | 5262 Header Analyzer              | 1.2                        | 7.0                            |
| CS Flare             | 5186 Header Analyzer              | 0.5                        | 3.3                            |
| CS Flare             | Steam                             | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Vent Meter | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Analyzer   | 0.0                        | 0.0                            |
| East Flare           | Camera and Recording System       | 1.3                        | 8.0                            |
| East Flare           | Tank 2799 Header Vent Meter       | 0.0                        | 0.0                            |
| East Flare           | East SARCO Header Vent Meter      | 0.0                        | 0.0                            |
| East Flare           | Tank 2799 Header Analyzer         | 0.0                        | 0.3                            |

|                  |                              |     |     |
|------------------|------------------------------|-----|-----|
| East Flare       | East Flare Steam             | 0.0 | 0.0 |
| Paraxylene Flare | Camera and Recording System  | 1.3 | 8.0 |
| Paraxylene Flare | Vent Meter                   | 0.0 | 0.0 |
| Paraxylene Flare | Analyzer                     | 0.1 | 0.8 |
| Paraxylene Flare | Steam                        | 0.0 | 0.0 |
| UDEX Flare       | Camera and Recording System  | 1.3 | 8.0 |
| UDEX Flare       | Tank 100 Header Vent Meter   | 0.0 | 0.3 |
| UDEX Flare       | UDEX Sarco Header Vent Meter | 0.0 | 0.0 |
| UDEX Flare       | Tank 100 Header Analyzer     | 0.0 | 0.3 |
| UDEX Flare       | UDEX Flare Steam             | 0.0 | 0.0 |
| West Flare       | Camera and Recording System  | 1.3 | 8.0 |
| West Flare       | 4901 West Header Vent Meter  | 0.0 | 0.0 |
| West Flare       | 4901 East Header Vent Meter  | 0.0 | 0.0 |
| West Flare       | Tank 97 Header Vent Meter    | 0.0 | 0.0 |
| West Flare       | Tank 98 Header Vent Meter    | 0.0 | 0.0 |
| West Flare       | West SARCO Header Vent Meter | 0.0 | 0.0 |
| West flare       | 4901 West Header Analyzer    | 0.1 | 0.8 |
| West Flare       | 4901 East Header Analyzer    | 0.0 | 0.0 |
| West Flare       | Tank 97 Header Analyzer      | 0.1 | 0.8 |
| West Flare       | Tank 98 Header Analyzer      | 0.1 | 0.5 |
| West Flare       | West Flare Steam             | 0.0 | 0.0 |

**TABLE 8.2 3<sup>rd</sup> Quarter 2018 Instrument Downtime Summary**

| <b>Covered Flare</b> | <b>Monitoring System</b>          | <b>System Downtime (%)</b> | <b>System Downtime (hours)</b> |
|----------------------|-----------------------------------|----------------------------|--------------------------------|
| CS Flare             | Camera and Recording System       | 0.0                        | 0.0                            |
| CS Flare             | 5262 Header Vent Meter            | 0.4                        | 8.0                            |
| CS Flare             | 5186 Header Vent Meter            | 0.2                        | 4.8                            |
| CS Flare             | 5262 Header Analyzer              | 3.0                        | 65.3                           |
| CS Flare             | 5186 Header Analyzer              | 2.4                        | 52.8                           |
| CS Flare             | Steam                             | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Vent Meter | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Analyzer   | 0.0                        | 0.0                            |
| East Flare           | Camera and Recording System       | 0.0                        | 0.0                            |
| East Flare           | Tank 2799 Header Vent Meter       | 1.4                        | 30.5                           |
| East Flare           | East SARCO Header Vent Meter      | 0.1                        | 1.5                            |
| East Flare           | Tank 2799 Header Analyzer         | 0.6                        | 13.8                           |
| East Flare           | East Flare Steam                  | 0.0                        | 0.0                            |
| Paraxylene Flare     | Camera and Recording System       | 0.0                        | 0.0                            |
| Paraxylene Flare     | Vent Meter                        | 0.3                        | 7.3                            |
| Paraxylene Flare     | Analyzer                          | 0.1                        | 2.5                            |
| Paraxylene Flare     | Steam                             | 0.0                        | 0.0                            |
| UDEX Flare           | Camera and Recording System       | 0.0                        | 0.0                            |
| UDEX Flare           | Tank 100 Header Vent Meter        | 0.0                        | 0.0                            |
| UDEX Flare           | UDEX Sarco Header Vent Meter      | 0.0                        | 0.5                            |
| UDEX Flare           | Tank 100 Header Analyzer          | 0.0                        | 0.0                            |
| UDEX Flare           | UDEX Flare Steam                  | 0.1                        | 2.5                            |
| West Flare           | Camera and Recording System       | 0.0                        | 0.0                            |

|            |                              |     |      |
|------------|------------------------------|-----|------|
| West Flare | 4901 West Header Vent Meter  | 0.0 | 0.0  |
| West Flare | 4901 East Header Vent Meter  | 0.0 | 0.0  |
| West Flare | Tank 97 Header Vent Meter    | 0.4 | 9.8  |
| West Flare | Tank 98 Header Vent Meter    | 0.4 | 8.3  |
| West Flare | West SARCO Header Vent Meter | 0.0 | 0.5  |
| West flare | 4901 West Header Analyzer    | 0.0 | 0.0  |
| West Flare | 4901 East Header Analyzer    | 0.0 | 0.0  |
| West Flare | Tank 97 Header Analyzer      | 1.0 | 21.0 |
| West Flare | Tank 98 Header Analyzer      | 1.0 | 22.8 |
| West Flare | West Flare Steam             | 0.0 | 0.0  |

**TABLE 8.3 4<sup>th</sup> Quarter 2018 Instrument Downtime Summary**

| <b>Covered Flare</b> | <b>Monitoring System</b>          | <b>System Downtime (%)</b> | <b>System Downtime (hours)</b> |
|----------------------|-----------------------------------|----------------------------|--------------------------------|
| CS Flare             | Camera and Recording System       | 0.1                        | 1.5                            |
| CS Flare             | 5262 Header Vent Meter            | 0.0                        | 0.0                            |
| CS Flare             | 5186 Header Vent Meter            | 0.0                        | 0.0                            |
| CS Flare             | 5262 Header Analyzer              | 0.0                        | 0.0                            |
| CS Flare             | 5186 Header Analyzer              | 0.1                        | 2.0                            |
| CS Flare             | Steam                             | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Vent Meter | 0.0                        | 0.0                            |
| East and West Flare  | Small Tie Valve Header Analyzer   | 0.0                        | 0.0                            |
| East Flare           | Camera and Recording System       | 0.1                        | 1.5                            |
| East Flare           | Tank 2799 Header Vent Meter       | 0.0                        | 0.0                            |



|                  |                              |     |      |
|------------------|------------------------------|-----|------|
| East Flare       | East SARCO Header Vent Meter | 0.0 | 0.3  |
| East Flare       | Tank 2799 Header Analyzer    | 0.0 | 0.8  |
| East Flare       | East Flare Steam             | 0.0 | 0.0  |
| Paraxylene Flare | Camera and Recording System  | 0.1 | 1.5  |
| Paraxylene Flare | Vent Meter                   | 0.8 | 17.8 |
| Paraxylene Flare | Analyzer                     | 0.1 | 2.3  |
| Paraxylene Flare | Steam                        | 0.0 | 0.0  |
| UDEX Flare       | Camera and Recording System  | 0.1 | 1.5  |
| UDEX Flare       | Tank 100 Header Vent Meter   | 0.2 | 5.0  |
| UDEX Flare       | UDEX Sarco Header Vent Meter | 0.0 | 0.5  |
| UDEX Flare       | Tank 100 Header Analyzer     | 0.2 | 5.0  |
| West Flare       | Camera and Recording System  | 0.1 | 1.5  |
| West Flare       | 4901 West Header Vent Meter  | 0.0 | 0.0  |
| West Flare       | 4901 East Header Vent Meter  | 0.0 | 0.0  |
| West Flare       | Tank 97 Header Vent Meter    | 0.0 | 0.0  |
| West Flare       | Tank 98 Header Vent Meter    | 0.0 | 0.0  |
| West Flare       | West SARCO Header Vent Meter | 0.0 | 0.3  |
| West flare       | 4901 West Header Analyzer    | 0.0 | 0.0  |
| West Flare       | 4901 East Header Analyzer    | 0.0 | 0.0  |
| West Flare       | Tank 97 Header Analyzer      | 0.1 | 2.5  |
| West Flare       | Tank 98 Header Analyzer      | 0.3 | 5.8  |
| West Flare       | West Flare Steam             | 0.0 | 0.0  |

- (2) If the total number of hours of Instrument Downtime claimed pursuant to Paragraph 45 exceeds 5% of the time in a Calendar Quarter the Covered Flare affected by the downtime is In Operation, an identification of the periods of downtime by date, time, cause (including Malfunction or maintenance), and, if the cause is asserted to be a Malfunction, the corrective action taken;

**Status: No Covered Flare incurred Instrument Downtime claimed pursuant to Paragraph 45 that exceeded 5% of the time the flare was In Operation in any Calendar Quarter, as noted by “None” in Tables 8.4 – 8.6.**

**TABLE 8.4 June 6 – June 30, 2018 Instrument Downtime Identification (if total hours exceeds 5%)**

| Covered Flare | Monitoring System | Start Date/Time | End Date/Time | Cause | Corrective Action |
|---------------|-------------------|-----------------|---------------|-------|-------------------|
| None          | None              | None            | None          | None  | None              |

**TABLE 8.5 3<sup>rd</sup> Quarter 2018 Instrument Downtime Identification (if total hours exceeds 5%)**

| Covered Flare | Monitoring System | Start Date/Time | End Date/Time | Cause | Corrective Action |
|---------------|-------------------|-----------------|---------------|-------|-------------------|
| None          | None              | None            | None          | None  | None              |

**TABLE 8.6 4<sup>th</sup> Quarter 2018 Instrument Downtime Identification (if total hours exceeds 5%)**

| Covered Flare | Monitoring System | Start Date/Time | End Date/Time | Cause | Corrective Action |
|---------------|-------------------|-----------------|---------------|-------|-------------------|
| None          | None              | None            | None          | None  | None              |

- (3) The total number of hours, expressed as both an absolute number of hours and a percentage of time that the Covered Flare was In Operation, in which the requirements of Paragraphs 43-44 were not applicable because the only gas or gases being vented were Pilot Gas or Purge Gas;

**ExxonMobil Beaumont Chemical Plant Covered Flares are not limited to Pilot Gas or Purge Gas because Covered Flares are currently unsealed, as noted by “None” in Tables 8.7-8.9.**

**TABLE 8.7 June 6 – June 30, 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

**TABLE 8.8 3<sup>rd</sup> Quarter 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

**TABLE 8.9 4<sup>th</sup> Quarter 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

(4) Exceedances of Combustion Efficiency Standards.

- i. The total number of hours, expressed as both an absolute number of hours and a percentage of time the Covered Flare was In Operation, of exceedances of the emissions standards in Paragraphs 43-44; provided however, that if the exceedance of these standards was less than 5% of the time in a Calendar Quarter and was due to one or more of the exceptions set forth in Paragraph 45, the report shall so note; and

**Status: No exceedance of combustion efficiency standards was due to one or more of the exceptions set forth in Paragraph 45, as noted by “None” in Tables 8.10 – 8.12.**

**TABLE 8.10 June 6 – June 30, 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

**TABLE 8.11 3<sup>rd</sup> Quarter 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

**TABLE 8.12 4<sup>th</sup> Quarter 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45**

| Covered Flare | Time (%) | Time (Hours) |
|---------------|----------|--------------|
| None          | None     | None         |

ii. If the exceedance of the emissions standards in Paragraphs 43-44 was not due to one of the exceptions in Paragraph 45 (Instrument Downtime), or if the exceedance was due to one or more of the exceptions in Paragraph 45 and the total number of hours caused by the exceptions exceeds 5% of the time in a Calendar Quarter that the Covered Flare affected by the Instrument Downtime was In Operation, an identification of each block period that exceeded the standard, by time and date; the cause of the exceedance (including startup, shutdown, maintenance, or Malfunction), and if the cause is asserted to be a Malfunction, an explanation and any corrective actions taken; and

**Status:** There were no exceedances of combustion efficiency standards during June 6 – June 30, 2018, as noted by “None” in Tables 8.13. . Exceedances of combustion efficiency standards during the 3<sup>rd</sup> Quarter of 2018 are listed in Table 8.14 and during the 4<sup>th</sup> Quarter of 2018 are listed in Table 8.15.

**TABLE 8.13 June 6 – June 30, 2018 Exceedance of Combustion Efficiency Standards**

| Covered Flare | Combustion Efficiency Standard | Start Date/ Time | End Date/ Time | Cause | Corrective Action |
|---------------|--------------------------------|------------------|----------------|-------|-------------------|
| None          | None                           | None             | None           | None  | None              |

**TABLE 8.14 3<sup>rd</sup> Quarter 2018 Exceedance of Combustion Efficiency Standards**

| <b>Covered Flare</b> | <b>Combustion Efficiency Standard</b> | <b>Start Date/ Time</b> | <b>End Date/ Time</b> | <b>Cause</b>  | <b>Corrective Action</b>   |
|----------------------|---------------------------------------|-------------------------|-----------------------|---|--|
| HP (West)            | NHVcz                                 | 09/14/2018<br>08:30     | 09/14/2018<br>08:45   | The root cause of the net heating value exceedance is increased injection of steam with the controls in manual operation during unit restart. | Review staffing plans and startup procedures for visible emissions and NHV management during unit restart. |

**TABLE 8.15 4<sup>th</sup> Quarter 2018 Exceedance of Combustion Efficiency Standards**

| <b>Covered Flare</b> | <b>Combustion Efficiency Standard</b> | <b>Start Date/ Time</b> | <b>End Date/ Time</b> | <b>Cause</b>   | <b>Corrective Action</b>                       |
|----------------------|---------------------------------------|-------------------------|-----------------------|--|--|
| Paraxylene           | NHVcz                                 | 12/04/2018<br>10:15     | 12/04/2018<br>10:30   | Steam controller was set to manual as a response to malfunctioning Paraxylene flow meter | Replaced flare probes on Paraxylene flow meter |

- (5) Compliance with Compressor Availability Requirements. Sufficient information to document compliance with the FGRS Compressor availability requirements of sub-Paragraph 38.b. For any period of non-compliance, the Defendants must identify the date, cause, and corrective action taken.

**Status: This section does not apply to this semi-annual reporting period. The FGRS Compressor availability requirements of sub-Paragraph 38.b., as noted in sub-Paragraph 38.f. below, must be an 8,760-hour rolling sum, rolled hourly, using only hours when Potentially Recoverable Gas was generated during all or part of the hour. The 8,760-hour rolling sum period began upon the Effective Date of June 6, 2018, for FGRS existing upon this Effective Date. For new FGRS, the 8,760-hour rolling sum period begins when a new FGRS first becomes available for operation and/or in operation.**

**Since the 8,760-hour rolling sum began will begin when FGRS is in operation, the reporting of this will be after one year of data becomes available.**

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## SECTION 9 ADDITIONAL MATTERS

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Consent Decree Paragraph 66i.

- i. Any additional matters that the Defendants believe should be brought to the attention of EPA, or LDEQ for the Baton Rouge Facilities.

**Status: None.**

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## SECTION 10 FENCELINE AIR MONITORING REPORTS

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Consent Decree Paragraph 67 a. – b.

The Defendants must submit Fenceline Air Monitoring Reports as part of each Semi-Annual Report. The Fenceline Air Monitoring Reports must contain the following information:

- a. In spreadsheet format, the individual sample results for each monitor comprising each Fenceline Monitoring System, each bi-weekly annual average benzene concentration difference value (once annual averages are available), and the corresponding meteorological data for the relevant monitoring periods. The first two columns of each spreadsheet shall be the date and time for each sample taken; and
- b. A detailed description of the actions and findings of any root cause analysis and corrective action(s) undertaken pursuant to Paragraph 3(g) of Appendix 2.2, including the known results of the corrective action(s) and the anticipated emissions reductions (in TPY per pollutant).

**This section does not apply to this semi-annual reporting period. ExxonMobil Beaumont Chemical Plant will begin collecting fenceline monitoring data June 6, 2019.**



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## SECTION 11 ANNUAL EMISSION DATA

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Consent Decree Paragraph 68

In the Semi Annual Report that is submitted on February 28 of each year, the Defendants must provide, for each Covered Flare, for the prior calendar year, the amount of emissions of the following compounds (in tons per year): VOCs, HAPs, NO<sub>x</sub>, CO<sub>2</sub>, methane, and ethane.

**As of the date of this Semi-Annual Report, the annual emissions are reflected in Table 11.1 below.**

**TABLE 11.1 2018 Annual Emissions Data**

| Covered Flare | Emissions, tons per year |      |                 |                 |         |        |
|---------------|--------------------------|------|-----------------|-----------------|---------|--------|
|               | VOCs                     | HAPs | NO <sub>x</sub> | CO <sub>2</sub> | Methane | Ethane |
| Paraxylene    | 13                       | 7    | 18              | 29,279          | 42      | 1      |
| LP (East)     | 43                       | 11   | 16              | 34,944          | 23      | 23     |
| HP (West)     | 47                       | 10   | 36              | 63,193          | 34      | 5      |
| CS            | 1                        | < 1  | 7               | 12,297          | 38      | 4      |
| UDEX          | 21                       | 6    | 9               | 20,523          | 18      | 3      |

## SECTION 12 ANY ADDITIONAL NON-COMPLIANCE

### Consent Decree Paragraph 69

Each Semi-Annual Report must also include a description of any non-compliance with the requirements of this Consent Decree not otherwise identified by Paragraph 66 along with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the Defendants must so state in the report. In such a case, the Defendants must investigate the cause of the violation and then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day the Defendants become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the Defendants of their obligation to provide the notice required by Section XI (Force Majeure).

**TABLE 12.1 Additional Non-Compliance**

| <b>Covered Flare</b> | <b>Requirement Paragraph</b> | <b>Start Date/ Time</b>                            | <b>End Date/ Time</b>                              | <b>Cause</b>   | <b>Corrective Action</b>  |
|----------------------|------------------------------|--|--|--|---|
| LP East and HP West  | 39.b. Visible Emissions      | LP East<br>09/13/2018<br>06:48<br>19:21            | LP East<br>09/13/2018<br>08:36<br>19:31            | Malfunctioning steam relief valves did not reseal, causing Olefins unit trip   | Repaired relief valve MPR6384 and replaced relief valve MPR6044 |
|                      |                              | HP West<br>9/13/2018<br>06:39<br>9/14/2018<br>5:54 | HP West<br>9/13/2018<br>08:20<br>9/14/2018<br>6:01 |  |   |
| UDEX                 | 39.b. Visible Emissions      | 12/18/2018<br>09:00                                | 12/18/18<br>16:25                                  | UDEX flare steam controller equation coefficients were not adjusted for the specific hydrocarbon composition during a different mode of operations | Updated coefficients on UDEX flare steam controller equation    |